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ABSTRACT

RHODAMINE-BASED FLUOROPHORES USEFUL AS LABELING REAGENTS

Fluorescent dyes based on rhodamine are derivatized to form labeled conjugates that fluoresce upon excitation with light of an appropriate wavelength. Particularly preferred embodiments are certain single isomer form rhodamine phosphoramidites. These rhodamine phosphoramidites enhance the efficiency of synthesizing rhodamine-labeled oligonucleotides by solid phase methods. Conjugate embodiments of the invention are prevented from being converted to a non-fluorescent lactam form due to having a fully substituted amide linkage derived from the 3-position carboxylate.